

IN THE UNITED STATES DISTRICT COURT  
OF THE EASTERN DISTRICT OF TEXAS  
TEXARKANA DIVISION

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U.S. DISTRICT COURT  
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BY M. Velvin

DATATREASURY CORPORATION

V.

No. 5:02CV95

INGENICO S.A., *d/b/a* GROUPE  
INGENICO, and INGENICO, INC.

DATATREASURY CORPORATION

V.

No. 5:02CV124

J.P. MORGAN CHASE & CO.,  
J.P. MORGAN CHASE BANK,  
AFFILIATED COMPUTER SERVICES,  
INC., and ACS IMAGE SOLUTIONS,  
INC.

DATATREASURY CORPORATION

V.

No. 5:03CV39

FIRST DATA CORPORATION, FIRST  
DATA MERCHANT SERVICES CORP.,  
TELECHECK SERVICES, INC. *d/b/a*  
TELECHECK INTERNATIONAL, INC.,  
and MICROBILT CORPORATION

ORDER

This Order applies to each of three cases brought by Plaintiff DataTreasury Corporation against several defendants for patent infringement. At issue are U.S. Patent No. 5,910,988 (“the ’988 patent”) and U.S. Patent No. 6,032,137 (“the ’137 patent”). The claim construction aspects of these cases have been divided into two phases – the first phase to determine which, if any, claim terms are to be construed under 35 U.S.C. § 112, ¶ 6, and the second phase to construe any

disputed claim terms. The Magistrate Judge in this case has entered her Report and Recommendation (“the Report”) in the first phase, regarding whether certain disputed patent claim terms should be construed according to 35 U.S.C. § 112, ¶ 6. Before the Court now are the Objections of Plaintiff Data Treasury and Defendants First Data, J. P. Morgan and Ingenico to certain recommendations in the Report. The Court finds that none of the disputed claim terms is in “means plus function” form, and none of the terms is subject to 35 U.S.C. § 112, ¶ 6.

## I. LEGAL PRINCIPLES

The claims of a patent define the scope of the invention and, accordingly, the extent to which the patent owner may exclude others from various activities. *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999). When the meanings of claim terms are disputed and the scope of a claim is at issue, those terms must be construed according to various claim construction principles. The construction of a patent claim, and the meaning of disputed claim terms, is a matter of law to be decided by the Court. *Markham v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996).

One aspect of claim construction involves determining whether 35 U.S.C. § 112, ¶ 6 applies to any claim limitation. In *Personalized Media Communications v. Int’l Trade Comm’n*, 161 F.3d 696 (Fed. Cir. 1998), the Federal Circuit held that “[w]hether certain claim language invokes 35 U.S.C. § 112, ¶ 6 is an exercise in claim construction and is therefore a question of law, reviewable de novo by this court,” citing *Mas-Hamilton Group v. LaGard, Inc.*, 156 F.3d 1206, 1213-14 (Fed. Cir. 1998).

Section 112, ¶ 6 provides:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Thus, the statute provides that an element in a claimed structural combination may be described in terms of the function it performs, and it need not be expressed in terms of what it is structurally. Likewise, an element in a claimed method, for example, comprising a combination of steps, may be expressed as a generic “step for” performing a specified function, and the claim need not express any act in support of that function. When an element in a claimed combination, be it an apparatus or a method, is expressed as a “means” or “step for” performing a particular function and does not recite structure or acts that support the function, § 112, ¶ 6 requires that element be construed as covering the structure or act disclosed in the patent specification that performs the recited function, and equivalents of that structure or act. In other words, the literal scope of a “means” or “step” element under § 112, ¶ 6 is limited to the disclosed structure(s) or act(s) and equivalents thereof.

#### **1. “Means Plus Function”**

To determine whether § 112, ¶ 6 applies to a claim limitation, the court must first look to the limitation itself to see if the word “means” is used. As the Federal Circuit said in *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1584 (Fed. Cir. 1996), “the use of the term ‘means’ has come to be so closely associated with ‘means-plus-function’ claiming that it is fair to say that the use of the term ‘means’ (particularly as used in the phrase ‘means for’) generally invokes section 112(6) and that use of a different formulation generally does not.” The Court has since held that the use of the word “means” gives rise to a presumption that § 112, ¶ 6 applies, and the absence of the word “means” gives rise to a presumption that § 112, ¶ 6 does not apply. *York Prods., Inc. v. Central Tractor*, 99 F.3d 1568 (Fed. Cir. 1996); *Personalized Media Communications, LLC v. Int’l Trade Comm’n*, 161 F.3d 696 (Fed. Cir. 1998); *Apex, Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364 (Fed. Cir. 2003).

A presumption that § 112, ¶ 6 applies may be overcome by a showing that, despite the presence of the word “means” in the limitation, the claim nevertheless recites sufficiently definite structure for performing the recited function. If the presumption is overcome, § 112, ¶ 6 will not be applied in construing that limitation. Conversely, a presumption that § 112, ¶ 6 does not apply may be overcome by a showing that the limitation is described in functional terms and the claim does not recite sufficiently definite structure for performing the specified function. If the presumption is overcome in that situation, § 112, ¶ 6 will be applied. In each case, the party opposing the presumption bears the burden of going forward with evidence to rebut the presumption, and the presumption may be overcome by a preponderance of the evidence. *Apex, Inc.*, 325 F.3d at 1372.

A claim phrase need not define a structure so specific as to imply one actual implementation of the structure in order to avoid the application of § 112, ¶ 6. The question is whether the phrase “connotes sufficient structure” to one of ordinary skill in the art to perform the functions identified by the limitation.

In *Greenberg*, 91 F.3d at 1583, the Court considered the claim language “detent mechanism defining conjoint rotation of said shafts.” In deciding that § 112, ¶ 6 was not invoked, it stated:

[T]he fact that a particular mechanism - here ‘detent mechanism’ - is defined in functional terms is not sufficient to convert a claim element containing that term into a ‘means for performing a specified function’ within the meaning of [§ 112, ¶ 6]. Many devices take their names from the functions they perform. The examples are innumerable, such as ‘filter,’ ‘brake,’ ‘clamp,’ ‘screwdriver,’ or ‘lock.’ . . . ‘Detent’ (or its equivalent ‘detent mechanism’) is just such a term. Dictionary definitions make clear that the noun ‘detent’ denotes a type of device with a generally understood meaning in the mechanical arts, even though the definitions are expressed in functional terms. It is true that ‘detent’ does not call to mind a single well-defined structure, but the same could be said of other commonplace structural terms such as ‘clamp’ or ‘container.’ What is important is not simply that a ‘detent’ or ‘detent mechanism’ is defined in terms of what it does, but that the term, as the name for structure, has a reasonably well understood meaning in the art.

The fact that a limitation is defined in terms of its function or the fact that the limitation does not connote a precise physical structure in the minds of those of skill in the art does not detract from the definiteness of structure. *Id.* Moreover, an adjectival qualification placed upon an otherwise

sufficiently definite structure does not make the sufficiency of that structure any less sufficient for purposes of § 112, ¶ 6. *Apex, Inc.*, 325 F.3d at 1374, citing *Personalized Media Commun., L.L.C.*, *supra*.

In *Personalized Media Commun., L.L.C.*, *supra*, the Court reviewed a ruling by an administrative law judge that a certain claim limitation was in “means plus function” form and subject to § 112, ¶ 6. The claim limitation was a “digital detector” for performing certain specified functions. The ALJ consulted dictionaries and found definitions for “detector,” “digital” and “digital circuit.” However, the ALJ found that these dictionary definitions did not conclusively answer the question of whether the phrase “digital detector” conveyed specific structure to one of ordinary skill in the art. The ALJ found that the specification of the patent did not describe a specific structure for a digital detector, but only described that component in functional terms. Lastly, the ALJ looked to the testimony of various experts who had testified that the term “digital detector” lacked a specific structure and could not be built by those of ordinary skill in the art. *Id.*, at 700.

The Federal Circuit Court first pointed out that the “digital detector” limitation did not employ the word “means” and therefore presumptively should not be construed under § 112, ¶ 6. The Court said that “neither intrinsic nor extrinsic evidence rebuts this presumption because the term ‘detector’ is a sufficient recitation of structure.” *Id.*, at 704. The Court went on to state:

‘Detector’ is not a generic structural term such as ‘means,’ ‘element,’ or ‘device’; nor is it a coined term lacking a clear meaning, such as ‘widget’ or ‘ram-a-fram.’ [footnote omitted] Instead, as noted by the ALJ by reference to dictionary definitions, ‘detector’ had a well-known meaning to those of skill in the electrical arts connotative of structure, including a rectifier or demodulator. No other extrinsic evidence, including the expert testimony, and no evidence intrinsic to the patent casts doubt on this conclusion. Moreover, neither the fact that a ‘detector’ is defined in terms of its function, nor the fact that the term ‘detector’ does not connote a precise physical structure in the minds of those of skill in the art detracts from the definiteness of structure. . . . Even though the term ‘detector’ does not specifically invoke a particular structure, it does convey to one knowledgeable in the art a variety of structures known as ‘detectors.’ We therefore conclude that the term ‘detector’ is a sufficiently definite structural term to preclude the application of § 112, ¶ 6.

*Id.*, at 704-05.

According to the Court, “the ALJ’s analysis (and the Commission’s arguments to this Court) centered around the ambiguity raised by the phrase ‘digital detector.’” But the Court held that “an adjectival qualification (‘digital’) placed upon otherwise sufficiently definite structure (‘detector’) does not make the sufficiency of that structure any less sufficient for purposes of § 112, ¶ 6.” *Id.*, at 705. The Court held that the phrase “digital detector” in the asserted claims recited “sufficiently definite structure” so as to avoid the application of § 112, ¶ 6.

In *Apex, Inc., supra*, the Court again considered the question of whether certain claim limitations should be construed under § 112, ¶ 6 despite the absence of the words “means” or “means for” in the limitations. In particular, several limitations were “circuits,” including a “first interface circuit,” an “on-screen programming circuit,” a “second interface circuit,” a “programmed logic circuit,” an “analog video overlay image generating circuit” and a “analog video overlay circuit.” The district court had ruled that each of these limitations was in “means plus function” form and subject to § 112, ¶ 6 because they did not “connote sufficient structure to perform the relevant functions recited in the elements.” *Id.*, at 1369.

Affirming that the absence of the term “means” invokes a rebuttable presumption that § 112, ¶ 6 does not apply to the limitation, the Court held that this presumption imposes on the party opposing the presumption the burden of going forward with evidence to rebut the presumption. *Id.*, at 1372. The opposer can rebut the presumption by showing that “the claim term fails to ‘recite sufficiently definite structure’ or else recites a ‘function without reciting sufficient structure for performing that function.’” *Id.*, citing *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359 (Fed. Cir. 2002). This burden must be carried by a preponderance of the evidence. *Id.* “The presumption can collapse when a limitation lacking the term ‘means’ nonetheless relies on functional terms rather than structure or materials to describe performance of the claimed function.” *Id.*

To determine whether a claim term recites sufficient structure, the court determines whether the term has an understood meaning in the art. *Id.* at 1372. To “aid in making this determination,” the court inquires as to whether the “term, as the name for the structure, has a reasonably well understood meaning in the art.” *Id.* The Court cautioned against undue focus on single words of the limitation, holding that one must look to the limitation as a whole. *Id.* In deciding whether a claim term recites sufficiently definite structure so as to avoid the application of § 112, ¶ 6, the court must keep in mind that the claim term does not need to call to mind a single well-defined structure. *Id.*

The Court found that “the term ‘circuit,’ by itself connotes some structure,” and it said “[i]n the absence of any more compelling evidence of the understanding of one of ordinary skill in the art, the presumption that § 112, ¶ 6 does not apply is determinative.” *Id.*, at 1373. Nevertheless, despite finding that the term “circuit” itself connotes some structure, the Court declined to hold that each “circuit” term was not in “means plus function” form. Rather, the Court found that the record was not adequately developed concerning the ordinary meaning of each term and whether the ordinary meanings each define sufficiently definite structure, and it remanded the case for further development of the record in that regard.<sup>1</sup>

Importantly, the Court held that,

[W]e decline to construe every claim limitation because the record has not been sufficiently developed. As is the case with other aspects of patent law, e.g. obviousness, a proper determination of whether the claim limitations should be construed as means-plus-function limitations requires an understanding of one of ordinary skill in the art. In this situation, it is appropriate to look to extrinsic evidence, including but not limited to dictionaries and expert testimony to assist the trier of fact in understanding the evidence.... In particular, the record should reflect the ordinary meaning of the claim limitations, as a whole, and whether these limitations suggest sufficiently definite structure to one of ordinary skill in the art.

*Id.* at 1374.

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<sup>1</sup> The Court found the record adequately developed with respect to two of the claim terms, and it ruled that those two terms were not in “means plus function” form.



Thus, a central inquiry is whether the claim limitation under consideration “suggest[s] sufficiently definite structure to one of ordinary skill in the art.” In making that determination, it is appropriate for a court to look to dictionary definitions and to appropriate extrinsic evidence, including expert testimony, to determine whether “sufficiently definite structure” is suggested to the ordinarily-skilled artisan. *Id.*, at 1374.

## 2. “Step Plus Function”

Section 112, paragraph 6, may also apply to a claimed combination of steps, as in a method claim. For a method claim, 35 U.S.C. § 112, ¶ 6 is implicated when a step is recited for performing a function, and no acts are recited that support that function. *O.I. Corp. v. Tekmar Co. Inc.*, 115 F.3d 1576, 1583 (Fed. Cir. 1997). The initial inquiry is whether the claim limitation in question uses the phrase “step for” in describing the element. The Federal Circuit, in *Masco Corp. v. U.S.*, 303 F.3d 1316 (Fed. Cir. 2002), said:

[I]n the context of method claims, the use of the term ‘step[s] for’ signals the drafter’s intent to invoke § 112, paragraph 6. *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583, 39 USPQ2d 1783, 1785 (Fed. Cir. 1996). However, even where the drafter employs the ‘step for’ language, section 112, ¶ 6 is implicated . . . only when steps plus function without acts are present.’ *O.I. Corp.*, 115 F.3d at 1582, 42 USPQ2d at 1782.

The Federal Circuit Court distinguishes between the phrase “step for” used in connection with a method claim limitation and the phrase “steps of” in the claim preamble, followed by a series of acts of which the claimed method is comprised. *Masco Corp.*, 303 F.3d at 1327 (“Neither of these claims employs the ‘step for’ language that signals the drafter’s intent to invoke § 112, paragraph 6; rather, the claims employ the term ‘steps of.’ Thus, there is no presumption that these limitations are in step-plus-function format.”)

As in the case of structural claim elements, the absence of the term “step for” gives rise to a presumption that § 112, ¶ 6 does not apply. *Generation II Orthotics v. Medical Tech.*, 263 F.3d 1356 (Fed. Cir. 2001). This presumption may be overcome by a showing, by a preponderance of



the evidence, that the claim recites a functional step and does not recite sufficient acts for performing the recited function.

Simply claiming a series of steps without recital of a function does not trigger the application of § 112, ¶ 6. *Epcon Gas Systems, Inc. v. Bauer Compressors*, 279 F.3d 1022 (Fed. Cir. 2002). Further, method claims that “parallel,” or have limitations similar to, apparatus claims admittedly subject to § 112, ¶ 6 are not themselves necessarily subject to the requirements of § 112, ¶ 6. *Id.* “Each claim must be independently reviewed in order to determine if it is subject to the requirements of § 112, paragraph 6.” *Id.*

Because of the way in which method claims are commonly drafted, a court should be cautious in applying § 112, ¶ 6 to a method claim element, absent the “step for” language. As the Federal Circuit has said:

Where the claim drafter has not signaled his intent to invoke § 112, paragraph 6 by using the ‘step[s] for’ language, we are unwilling to resort to that provision to constrain the scope of coverage of a claim limitation without a showing that the limitation contains nothing that can be construed as an act. Method claims are commonly drafted, as in this case, by reciting the phrase ‘steps of’ followed by a list of actions comprising the method claimed. An application of § 112, paragraph 6 in the present circumstances would render the scope of coverage of these method claims uncertain and disrupt patentees’ settled expectations regarding the scope of their claims. ‘[C]ourts must be cautious before adopting changes that disrupt the settled expectations of the inventing community.’ *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S. Ct. 1831, 1834, 62 USPQ2d 1705, 1713 (2002). We thus hold that where a method claim does not contain the term ‘step[s] for,’ a limitation of that claim cannot be construed as a step-plus-function limitation without a showing that the limitation contains no act.

*Masco Corp.*, 303 F.3d at 1327.

In this case, Plaintiff Data Treasury has objected to the Report with respect to three (3) claim terms found to be in “means plus function” form and subject to 35 U.S.C. § 112, ¶ 6. Defendants, collectively, have objected to the Report with respect to ten (10) claim terms found not to be in “means plus function” or “step plus function” form, although Defendants’ objections are not uniform. Defendant First Data requests that the Report be amended to reflect that First Data has

argued that seven (7) claim terms should be construed under 35 U.S.C. § 112, ¶ 6. Footnote 2 in the Report makes clear how the positions of Defendants differ, and it indicates that Defendant First Data has argued with respect to seven claim terms. No amendment to the Report is needed in that regard.

## II. THE CLAIM TERM “SUBSYSTEM”

Defendant First Data objects that the term “subsystem,” even under the definition adopted by the Report, “does not connote any specific structure,” but “merely denotes a part or parts of a larger system that accomplishes some function.” First Data Brief, at p. 6. While arguing that this term does not specifically evoke a particular or precise physical structure, First Data does nonetheless concede that the term connotes at least some structure. *See* First Data Brief, at p. 6 (stating that “[t]he term encompasses any kind of hardware or software (e.g., programs, routines or subroutines) that comprise a part (or parts) of a larger system.”).

The Report defines “subsystem” to be “an organization of computer components (e.g., a tape drive and controller) that comprises a functional unit that is part of a larger system,” citing *Modern Dictionary of Electronics, Sixth Edition*, by Rudolf Graf, 1997. As stated in the Report, this definition itself connotes some structure, although the term does not specifically evoke a particular structure or a precise physical structure. However, a term need not specifically evoke a particular structure or a precise physical structure in order to connote some structure. In fact, the Federal circuit has held that a term need not specifically evoke a particular structure or a precise physical structure in order to connote sufficiently definite structure. *See Personalized Media*, 161 F.3d at 704-05 (holding that the term “detector” connotes sufficiently definite structure, even though the term “detector” does not specifically invoke a particular structure).

### III. PLAINTIFF'S OBJECTIONS

In the Report, the Magistrate Judge recommended that three claim terms be construed as “means plus function” elements – “imaging subsystem,” “data management subsystem” and “management subsystem.” The parties treated the phrases “data management subsystem” and “management subsystem” as identical for purposes of deciding whether the terms are in “means plus function” form and, thus, subject to 35 U.S.C. § 112, ¶ 6. The Court finds that these three claim terms are not in “means plus function” form and are not subject to § 112, ¶ 6.

#### 1. “imaging subsystem”

The “imaging subsystem” is one part of the “data access subsystem” in the claims of the patents. The “imaging subsystem” performs the function of capturing documents and receipts (the ’988 patent) or capturing checks (the ’137 patent). The term is used in the independent claims but is not further explained in any of the dependent claims.

The term is not used in the patent specifications, and in its original briefs before the Magistrate Judge, Plaintiff did not submit a definition from a dictionary or treatise. Dr. Macready, Plaintiff’s expert, testified that there is “enough detail in the patents” to support a conclusion that the term connotes sufficiently definite structure. However, as indicated in the Report, the fact that a patent contains a detailed description of a structure corresponding to a selected claim limitation does not necessarily mean that limitation is not in “means plus function” form.

With its objections to the Report, Plaintiff has submitted a dictionary definition for the phrase “imaging system.” From the *Cyber Dictionary: Your Guide to the Wired World*, by David Morse, 1996, “[t]he term *imaging system* refers to the software and equipment used to put images into digital format, or to compress, store, or retrieve an image. Examples of imaging equipment are scanners, digital optical recorders, and digital still video cameras.” While this definition is directed specifically to an “imaging system” rather than to an “imaging subsystem,” the Court finds that a

“subsystem” is structurally the same as a “system,” in the context of the relevant art. The Report noted that the term “subsystem” is defined in the *Modern Dictionary of Electronics*, 6<sup>th</sup> Edition, as “a part or division of a system which in itself has the properties of a system.” Hence, in the context of the relevant art, a “subsystem” is structurally the same as a “system,” the difference being that, as previously stated, a “subsystem” is simply a part or division of a “system.”

In urging that this claim term be construed under 35 U.S.C. § 112, ¶ 6, Defendants argued that the term “imaging subsystem” is not a well-understood name of a definite structure used by persons of ordinary skill in the relevant art, and that it does not describe a definite structure that is sufficient to perform entirely the function of capturing documents and receipts or capturing checks. Defendants argued that the phrase has no clear, accepted meaning to one of ordinary skill in the art, that the term “subsystem” itself does not define a definite structure, and that the addition of the word “imaging” merely adds a functional descriptor to the term “subsystem.” In support of Defendant’s position, Dr. Grimes opined that the term “imaging subsystem” “has no clear, accepted meaning to one of ordinary skill in the art, and is defined only by the written description.” Similarly, Dr. Dahlberg opined that “a person of ordinary skill in the art would not be able to identify definite structure to perform the specific functions identified in this claim element.” She also stated that she is “not aware of any system or subsystem that handles images that is referred to by persons of ordinary skill in the art as ‘imaging subsystems’.”

In responding to Plaintiff’s objections and definitions, Defendant J. P. Morgan argues that the definitions add nothing to the record and further argues that the term “imaging subsystem” does not have a well understood meaning to those skilled in the art of a definite structure, sufficient to perform the stated functions entirely. Defendant argues that the new definitions are primarily function and process oriented and provide, at best, structural context for the claim limitations. Defendant Ingenico argues that the newly submitted definitions do not provide the ordinary meaning for the term “imaging subsystem,” as they are not definitions for the actual claim term.

In view of the evidence presented, the Court finds that the claim term “imaging subsystem” connotes sufficiently definite structure to one of ordinary skill in the art for performing the function recited in the claims for this element. The term connotes software and equipment used to put images into digital format, or to compress, store, or retrieve images, and the function recited in the claims for the “imaging subsystem” is that of “capturing” certain documents. The definition provides several examples of equipment that can comprise an “imaging system” or “imaging subsystem.” This definition is akin to that found for the term “interface circuit” by the Federal Circuit Court in *Apex, Inc., supra*, where the Court found “interface circuit” to be defined as “a circuit that links one type of logic family with another or with analog circuitry.” The definition of the term “interface circuit,” while expressed primarily in functional terms, recites several examples of an interface circuit, including a line driver and analog to digital converters. *Id.*, at 1374. In view of this definition, the Court in *Apex* found the term to connote sufficiently definite structure and not subject to 35 U.S.C. § 112, ¶ 6.

The Court finds that the term “imaging subsystem” in the claims of the ’988 and ’137 patents is not in “means plus function” form and is not subject to 35 U.S.C. § 112, ¶ 6. This claim element does not include the words “means” or “means for,” and therefore the term is presumptively not in “means plus function” form. In view of the presumption that the term is not in “means plus function” form, and the dictionary definitions of the terms “imaging system” and “subsystem,” the Court finds that Defendants’ evidence is insufficient to show that the term “imaging subsystem” is in “means plus function” form. As the Federal Circuit Court held in *Personalized Media, supra*, a claim term can connote sufficiently definite structure despite expert testimony to the effect that the term lacks a specific structure and cannot be built by those of ordinary skill in the art. *Id.*, at 700.

## 2. “(data) management subsystem”

The “data management subsystem” (or “management subsystem” in certain claims) is a part of the “central data processing subsystem” in the claims. Depending on the claim in which it is used, the functions to be performed by this limitation include managing the processing, sending, and storing of transaction data, or managing the collecting and sending of transaction data.

In its original briefs before the Magistrate Judge, Plaintiff did not submit a definition from a dictionary or treatise for this term. Dr. Macready stated that he understands the term “data management subsystem” to be structural in nature, that the claim language is understood as structural, and that it recites interrelationships between structural elements such that a physical system is claimed. Dr. Macready argued that in view of the “more detailed specification” of the “data management subsystem” obtained “by looking at the entire patent and not just the language of its claims, it seems natural to interpret this detail in a manner in which sufficient structure has been recited,” and he looked to the patent specification to find certain structures that perform the function recited for the “management subsystem.” But as already stated, the fact that a patent specification contains a detailed description of a structure corresponding to a selected claim limitation does not necessarily mean that limitation is not in “means plus function” form. Plaintiff also referred to various dependent claims to argue that the “management subsystem” may include several physical structures, such as a server, a database subsystem, a report generator, and others. But a “means plus function” limitation in an independent claim may be further specified in a dependent claim to comprise a specific structure, and the existence of the dependent claim does not transform the limitation into a “non-means” limitation for purposes of the independent claim.

With its objections to the Report, Plaintiff has submitted a dictionary definition for the phrase “data management system.” In the *Computer Dictionary, Second Edition*, from Microsoft Press, 1994, under “data management system,” one finds the notation “*See database management system.*” The term “database management system” is abbreviated as “DBMS” by that same source and is

defined as “[a] layer of software between the physical database and the user. The DBMS manages all requests for database action (for example, queries or updates) from the user. Thus, the user is spared the necessity of keeping track of the physical details of file locations and formats, indexing schemes, and so on. In addition, a DBMS permits centralized control of security and data integrity requirements. *See also* database engine.” This definition connotes sufficiently definite structure for performing functions of managing the processing, sending, and storing of data, or managing the collecting and sending of data.

Defendants’ experts argued that the terms “management subsystem” and “data management subsystem” are not “well-understood name[s] of a definite structure used by persons of ordinary skill in the relevant art” and that the terms “management” and “data management” do not describe any definite structure, alone or when added to the word “subsystem.” Dr. Dahlberg acknowledged that the context of the claims is structural, but she opined that the claim term “does not disclose to a person of ordinary skill in the art of any definite structure.” According to her, a person of ordinary skill in the art would not be able to identify definite structure to perform the specific functions identified in the claim for this element. According to Dr. Grimes, the claim terms “management subsystem” and “data management subsystem” have no “clear, accepted meaning to one of ordinary skill in the art, and are only defined by the written description.”

In response to Plaintiff’s objections and definitions, Defendant J. P. Morgan argues that the definitions add nothing to the record, and further argue that the term “management subsystem” does not have a well understood meaning to those skilled in the art of a definite structure, sufficient to perform the stated functions entirely. Defendant argues that the definitions are primarily function and process oriented and provide, at best, structural context for the claim limitations. Defendant Ingenico argues that the definitions do not provide the ordinary meanings for the terms “management subsystem” and “data management subsystem,” as they are not definitions for the actual claim terms. Defendant Ingenico also argues that the definitions do not establish any structure for performing the



recited functions of collecting, processing, sending and storing the transaction data.

In view of the evidence presented, the Court finds that the terms “management subsystem” and “data management subsystem” are not in “means plus function” form and should not be construed according to 35 U.S.C. § 112, ¶ 6. These claim terms do not employ the word “means” and thus are presumptively not in “means plus function” form. Moreover, the dictionary definitions of “data management system” and “subsystem” suggest that the term “data management subsystem” connotes sufficiently definite structure to a person of ordinary skill in the art for performing the recited functions. In view of the presumption and the dictionary definitions, the Court finds that Defendants’ evidence is insufficient to show that the terms “data management subsystem” and “management subsystem” are in “means plus function” form. As the Federal Circuit held in *Personalized Media, supra*, a claim term can connote sufficiently definite structure despite expert testimony to the effect that the term lacks a specific structure and cannot be built by those of ordinary skill in the art. *Id.*, at 700.

#### **IV. DEFENDANTS’ OBJECTIONS**

In the Report, the Magistrate Judge found the majority of the disputed claim terms were not in “means plus function” form. Defendant Ingenico objected to the Report concerning six (6) of those terms, Defendant First Data objected concerning four (4) terms, and Defendant J.P. Morgan objected concerning seven (7) terms. The Court overrules the Defendants’ objections with respect to each of the disputed claim terms and affirms the Magistrate Judge’s findings with respect to those terms.

**1. “data access controller”**

All Defendants have objected to the Report concerning this claim term. The Report recommends that the term “data access controller” be found to not be in “means plus function” form and not subject to 35 U.S.C. § 112, ¶ 6. The data access controller is a part of the data access subsystem, and it performs the function of “managing the capturing and sending of the transaction data.” As discussed above, the “imaging subsystem” is also a part of the “data access subsystem,” and it performs the function of capturing documents and receipts (the ’988 patent) or capturing checks (the ’137 patent).

Defendants argued that the “data access controller” is defined by the functions it performs, and it does not recite sufficient structure for performing those functions. In particular, Dr. Dahlberg stated that the term “is not a well-understood name of a definite structure used by persons of ordinary skill in the relevant art” and “is only a generic reference to indefinite structure.” She argued that the term “controller,” itself, is “a generic functional term used to refer to instruments, devices, or interfaces that essentially exercise some form of control.” She also argued that “a more specific functional description is required before a person of ordinary skill in the art would understand what kind of control is desired and with what kind of device,” and she provided examples of a thermostat to control a heating and air conditioning unit, and a cruise-control to maintain a constant speed with an automobile. Dr. Dahlberg argued that the addition of the modifiers “data” and “access” to the word “controller” does not provide sufficient specificity of definite structures. She found these modifiers simply to be additional functional descriptors. Dr. Grimes said that the term “data access controller” does not describe a definite structure that is sufficient to perform entirely the functions recited in claim 1 of the ’988 patent. He argued that the term “has no clear, accepted meaning to one of ordinary skill in the art, and is only defined by the written description.”

In its Objections to the Report, Defendant J. P. Morgan argues that the definition of the word “controller” as recommended by the Magistrate is inconsistent with its use in the patent

specifications, and that the term “data access controller” is a coined term having no well-understood meaning to persons of ordinary skill in the art as the name of a definite structure. Defendant J. P. Morgan also objects to the analogy drawn between the “data access controller” and the term “digital detector” in the *Personalized Media* case, arguing that the term “detector” was found to have a well understood meaning of definite structure, whereas in this case, none of the words in the term “data access controller” has a well understood meaning. Defendant First Data objects, arguing that, given the definition found by the Magistrate, a “controller” is not sufficient structure for performing all the functions recited for the claim element. Defendant Ingenico argues that the “data access controller” manages functions wholly different from “data access” and that the definition of controller does not indicate structure necessary to perform the recited management functions.

Plaintiff submitted a dictionary definition for the word “controller.” The *Modern Dictionary of Electronics*, Sixth Edition, by Rudolf Graf, defines “controller” as “a hardware interface that accepts instructions from a computer and reformats them to program an instrument or peripheral.” An online encyclopedia for computer terms defines “controller” as “a device that controls the transfer of data from a computer to a peripheral device and vice versa. For example, disk drives, display screens, keyboards, and printers all require controllers. In personal computers, the controllers are often single chips.” *Webopedia*, copyright 2003, maintained by Jupitermedia Corporation. The *Free On-line Dictionary of Computing*, copyright 1993-2003, defines “controller” as “<hardware> part of a computer, typically a separate circuit board, which allows the computer to use certain kinds of peripheral devices. A disk controller is used to connect hard disks and floppy disks, a network controller is used for Ethernet. Other controllers are: keyboard controller, interrupt controller and graphics controller.” In addition, a “controller” is defined in *Webster’s Revised Unabridged Dictionary*, 1996, 1998, as “any electric device for controlling a circuit or system.”

In view of the above dictionary definitions, the term “controller” connotes structure for interfacing between a computer and an instrument or peripheral, for controlling the transfer of data

between a computer and a peripheral device, for facilitating use of a peripheral device by a computer, and for controlling a circuit or system. Exemplary structures the term connotes include a computer chip or a circuit board programmed to perform the functions needed or desired by the computer, the system, or the peripheral device. In accordance with these dictionary definitions, a “controller” cooperates with a computer or system to perform a variety of tasks, including receiving instructions from a computer, reformatting the instructions, programming a peripheral device, controlling the transfer of data from the computer to a peripheral device and vice versa, aiding the computer in the computer’s use of the peripheral, and controlling the peripheral. The dictionary definitions of the term “controller” make it clear that a controller can be an interface between a computer and a peripheral, thus having the capability to communicate with either device. For example, in the context of storage access, a computer can store data to and read data from a hard disk or storage disk through a disk controller, or, in the context of an input/output access, a computer can receive input from a scanner through an I/O controller. In these examples, the controller receives data from the peripheral and provides that data to the computer, and the controller controls or manages the transfer of data between the peripheral and the computer.

In the context of the claims at issue, the “data access controller” manages the “capturing” function of a peripheral “imaging subsystem” and manages the sending of data between the peripheral and the system. The patent specification describes a “DAT controller” that is associated with the data access subsystem. ’988 patent, 5:30-39 and 7:31-33. This controller is identified as a workstation that performs processing tasks and Input/Output (I/O) tasks that are typically performed by a processor. The DAT controller compresses, encrypts and tags the bitmap image to form a Tagged Encrypted Compresses Bitmap Image (TECBI). The DAT controller also manages the Input/Output (I/O). In particular, the DAT controller manages various devices that collect and send transaction data and that together make up the data access subsystem, devices such as a scanner, a digital storage, an optional printer, and a modem. ’988 patent, 5:32-39 and 7:31-40.

The Court finds that the use of the term “controller” in the patent specifications is consistent with the dictionary definitions for the term. In particular, the DAT controller acts as an interface between a peripheral (e.g., a scanner, a digital storage, an optional printer, or a modem) and the other components in the system. The DAT controller facilitates the use of the peripheral by the system. Moreover, the specification indicates that this same controller encrypts the data, and performs other transformations of the data, while operating as an interface between the peripheral and the system. Claim 4 of the ’988 patent also specifies that the “data access controller” “transforms the captured transaction data to a bitmap image, a compressed bitmap image, an encrypted, compressed bitmap image, and an encrypted, compressed bitmap image tagged with information identifying a location and time of the transaction data capture.” The Court finds that these functions are within the scope of a controller’s responsibility of controlling the transfer of data between the peripheral and the computer or system, and further finds that these functions are consistent with the dictionary definitions of the term “controller.”

Although the term “controller” may be a broad term and may not call to mind a specific structure or implementation, the Court finds that this term connotes sufficiently definite structure to perform the recited functions. The issue before the Court with respect to the term “data access controller” is analogous to that before the Federal Circuit in *Personalized Media*, discussed earlier. In *Personalized Media, supra*, the Federal Circuit held that the word “detector” was itself sufficiently definite to avoid the application of § 112, ¶ 6. The Court found that “[e]ven though the term “detector” does not specifically invoke a particular structure, it does convey to one knowledgeable in the art a variety of structures known as ‘detectors.’” The Court in *Personalized Media* therefore concluded that the term “detector” is a sufficiently definite structural term to preclude the application of § 112, ¶ 6. The Court held that the addition of the word “digital” to the word “detector” did not render the claim term less definite, but rather made the term more definite. Thus, in that case, the addition of an adjectival modifier to an otherwise sufficiently definite term

did not render the claim term indefinite such that § 112, ¶ 6 should apply. The Court in this case finds that while the term “controller” does not specifically invoke a particular structure, it connotes sufficiently definite structure for performing the functions recited in the claims, much in the same way the Federal Circuit found the term “detector” to be a sufficiently definite structure in *Personalized Media*. The addition of the adjectival phrase “data access” does not render the claim term less definite.

In view of the dictionary definitions and the intrinsic evidence, the Court finds that the term “controller” connotes sufficiently definite structure to one of ordinary skill in the art for performing the functions recited in the claims for this limitation. Moreover, as the term connotes, for example, a computer chip or a circuit board programmed to perform the functions needed or desired by the computer, the system, or the peripheral device, the “controller” is sufficiently definite structure for performing functions required of it by the computer or system. The addition of the adjectival modifier “data access” does not make the claim term less definite. Although “controller” may be a broad term and may not call to mind a specific structure or implementation, the term is sufficiently definite such that § 112, ¶ 6 does not apply. *Apex, Inc.*, 325 F.3d at 1372.

The absence of the word “means” from this claim term gives rise to a presumption that § 112, ¶ 6 does not apply, and in view of the dictionary definitions for “controller” and other intrinsic evidence, the Court finds that Defendants have not presented sufficient evidence to overcome the presumption. Nothing in the patent specification or prosecution history rebuts this presumption. Further, the Court finds that the use of the term “controller” in the patent specification is consistent with its dictionary definitions. Accordingly, the Court finds that the term “data access controller” is not in “means plus function” form and should not be construed according to 35 U.S.C. § 112, ¶ 6.

## 2. “data access subsystem”

The Magistrate Judge recommended that this claim term not be construed under 35 U.S.C. § 112, ¶ 6, and all three defendants objected to that recommendation. The “data access subsystem” is a part of each claim that is directed to a “system for central management, storage and report generation of remotely captured paper transactions.” In each claim, the “data access subsystem” includes the “data access controller” and the “imaging subsystem.” The “data access subsystem” functions include capturing and sending paper transaction data and subsystem identification information, and providing encrypted subsystem identification information and encrypted paper transaction data to a data processing subsystem. According to the claims, the “data access controller” portion of the “data access subsystem” manages the capturing and sending of the transaction data, and the “imaging subsystem” portion of the “data access subsystem” captures certain specified data. The claim term “data access subsystem” does not include the words “means” or “means for,” thus the term is presumptively not in “means plus function” form.

The parties submitted opposing expert opinions as to whether this claim term connotes sufficiently definite structure so as to avoid the application of 35 U.S.C. § 112, ¶ 6. Plaintiff’s expert Dr. Macready, referring to the description in the patent specifications, opined that “it seems clear that this claim element connotes sufficiently definite structure that persons of ordinary skill in the art would avoid interpreting this term based only on its function.” Defendants’ expert Dr. Dahlberg argued that this claim phrase “is not a well-understood name of a definite structure used by persons of ordinary skill in the relevant art.” Dr. Grimes, another of Defendants’ experts, argued that the phrase “remote data access subsystem” does not describe “a definite structure that is sufficient to perform entirely the functions” recited in the claims for this limitation. He opined that the phrase “has no clear, accepted meaning to one of ordinary skill in the art, and is only defined by the written description.” No definition from a dictionary or treatise was submitted for the claim term as a whole.



In recommending the term “data access subsystem” not be construed as a “means plus function” element, the Magistrate found that the claims themselves recite sufficiently definite structure for performing the recited functions. The Report points out that, consistent with the dictionary definition of the term “subsystem,” the patent claims themselves specify that the “data access subsystem” includes a “data access controller” and an “imaging subsystem.” The Report recognized that the recitation in the claims parallels the ordinary meaning of the word “subsystem,” suggesting that the term “data access subsystem” connotes sufficiently definite structure for performing the recited functions. In view of the presumption and the recitations in the claims themselves, the Report recommended that the phrase “data access subsystem” be found to not be in “means plus function” form.

In their Objections, Defendants argue that the “data access subsystem” cannot connote sufficiently definite structure for performing its functions when it includes a component (the “imaging subsystem”) that does not connote sufficiently definite structure for performing its associated function. Defendants have failed to cite any legal authority that mandates that, for a limitation to be sufficiently definite so as to avoid application of 35 U.S.C. § 112, ¶ 6, the limitation can comprise only definite structures. That is, Defendants have cited no legal support for their apparent contention that a sufficiently definite structural component of a claimed combination cannot be further specified, within the same claim, to include a functional sub-component. To the contrary, the Federal Circuit has noted that the fact that a sufficiently definite structural limitation is defined in terms of its function does not detract from the definiteness of the structure. *See Greenberg, supra*. In any event, this Court has found that the claim term “imaging subsystem” connotes sufficiently definite structure and is not in “means plus function” form.

In the case of the “data access subsystem” claim term, the functions to be performed include capturing and sending paper transaction data and subsystem identification information, and providing encrypted subsystem identification information and encrypted paper transaction data to

a data processing subsystem. As discussed above, the claim term “data access controller” connotes sufficiently definite structure for performing the functions recited in the claims for that limitation, including managing the capturing and sending of data, as well as performing an encryption function. Moreover, the “data access controller” connotes sufficiently definite structure for performing functions required of it by the “data access subsystem,” including providing identification information and encrypted identification information. The “imaging subsystem” sub-component is responsible for capturing certain specified data, and the Court has found that the “imaging subsystem” claim term connotes sufficiently definite structure for performing its recited function, thus avoiding the application of 35 U.S.C. § 112, ¶ 6.

With respect to the “data access subsystem” term, the Court finds that the claim itself recites sufficiently definite structures for performing the recited functions. The “data access subsystem” claim term includes two expressly recited elements, an “imaging subsystem” and a “data access controller,” each of which the Court has determined connotes sufficiently definite structure. Thus, when viewed in light of the expressly recited terms “data access controller” and “imaging subsystem,” the Court finds that the term “data access subsystem” connotes sufficiently definite structure for performing all of the recited functions. Moreover, the phrase “data access subsystem” is presumptively not subject to § 112, ¶ 6 because of the absence of the word “means,” and the Court finds that Defendants have not presented sufficient evidence to overcome that presumption. Accordingly, the Court finds that the phrase “data access subsystem” is not in “means plus function” form and should not be construed according to § 112, ¶ 6.

### 3. “data collecting subsystem”

All Defendants objected to the Report concerning this claim term. The Magistrate Judge recommended this claim limitation not be construed as a “means plus function” term under 35 U.S.C. § 112, ¶ 6. The “data collecting subsystem” is found in various dependent claims in the ’988 and ’137 patents. Those claims specify that the “data collecting subsystem” performs the functions of collecting and sending the electronic or paper transaction data.

Plaintiff did not submit a definition from a dictionary or other source for the claim term as a whole, but it did submit a dictionary definition for the term “data collection.” The *Modern Dictionary of Electronics, Sixth Edition*, 1997, defines “data collection” as “in a computer, the transferring of data from one or more points to a central point.” The term “subsystem,” as mentioned earlier, is defined as “an organization of computer components (e.g., a tape drive and controller) that comprises a functional unit that is part of a larger system.” *Modern Dictionary of Electronics, Sixth Edition*, 1997. Thus, the phrase “data collecting subsystem” connotes an organization of computer components whose function it is to transfer data from one or more points to a central point.

As pointed out by the Magistrate Judge, the specification of the patents uses this claim phrase to describe a DataTreasury System Access Collector (DAC) 400 as part of an overall system. ’988 patent, 4:60-67. The DAC 400 includes servers that are connected on a common network, and those servers manage the collection and intermediate storage of data that are retrieved from the remote data access subsystems 200. According to the specification, the DAC 400 polls the remote data access subsystems to receive data that has accumulated in those subsystems, then passes the accumulated data to the central data processing subsystem. ’988 patent, 5:3-9.

The DAC server described in the specification includes a disk storage system that stores images and data collected and managed by the DAC servers 402. The DAC server inserts images and data received from the remote data access subsystems into a database that is stored on the disk storage system. ’988 patent, 11:44-55. Thus, the use of phrase “data collecting subsystem” in the

specification is consistent with its ordinary meaning.

Defendants argued that the phrase “data collecting subsystem” is not a well-understood name of a definite structure used by persons of ordinary skill in the relevant art. One of Defendants’ experts, Dr. Dahlberg, opined that a person of ordinary skill in the art “would not be able to determine any definite structure or materials” comprising the data collecting subsystem by looking solely at the claim language. She argued that the phrase “data collecting subsystem” is only a generic reference to an indefinite structure that is only understood through its functional requirements. Another of Defendants’ experts, Dr. Grimes, argued that the phrase “data collecting subsystem” does not describe a definite structure “that is sufficient to perform entirely the functions of collecting and sending the electronic or paper transaction data.” He opined that the phrase has no clear, accepted meaning to one of ordinary skill in the art and is only defined by the written description in the patents.

In their objections to the Report, Defendants argue that the Report has arrived at an ordinary meaning for the term “data collecting subsystem” by combining definitions of “data collection” and “subsystem,” instead of finding a dictionary definition for the term as a whole. While the Court must consider the claim term as a whole in deciding whether it connotes sufficiently definite structure, the Court is not so constrained in how it arrives at its understanding of the ordinary meaning, if any, of the term. As the Federal Circuit said in *Apex, Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1374 (Fed. Cir. 2003), “it is appropriate to look to extrinsic evidence, including but not limited to dictionaries and expert testimony to assist the trier of fact in understanding the evidence.” And although the Federal Circuit has cautioned against undue focus on individual words in a claim term, that Court’s rulings do not prohibit one from considering the individual words to arrive at an understanding of the ordinary meaning, if any, of a claim term as a whole. In fact, in *Personalized Media, supra*, for example, the Federal Circuit analyzed individually the terms “digital” and “detector” before concluding that the term “digital detector” has sufficiently definite structure.

Defendants also argue in their objections that, even assuming the definition found by the Court is correct, it is almost entirely functional, the only structure being “an organization of computer components.” Defendants argue that this definition is insufficiently structural to perform any particular function, and that such an interpretation would allow a patentee to avoid means-plus-function construction by simply substituting the word “subsystem” for the word “means.” And, Defendants argue, a broad term, such as “subsystem,” is as indefinite as the term “means.” The Court disagrees, as it has already found that the word “subsystem,” in this case, does connote some structure. Moreover, the fact that a term is broad in its scope does not mean the term is indefinite so as to invoke the provisions of 35 U.S.C. § 112, ¶ 6. *See Apex, Inc.*, 325 F.3d at 1372.

Defendants also object that even if the term “data collecting subsystem” connotes some structure for collecting data, it does not connote any structure for sending data, as required by the claims. Again the Court disagrees because “an organization of computer components” plainly connotes structure that is capable of sending, as well as collecting, data. Even Defendant First Data, for example, admits the term “subsystem” itself “encompasses any kind of hardware or software (e.g., programs, routines or subroutines) that comprise a part (or parts) of a larger system.”

The Court finds that the phrase “data collecting subsystem” connotes sufficiently definite structure to a person skilled in the art because it suggests a collection of computer components that collect data from one or more points in a system. Furthermore, as noted, the plain meaning is consistent with the use of the phrase in the specification. Moreover, the absence of the word “means” gives rise to a presumption that § 112, ¶ 6 does not apply, and the Court finds that the Defendants have not overcome that presumption. Nothing in the patent specification or prosecution history rebuts this presumption.

For the foregoing reasons, the Court finds that the term “data collecting subsystem” is not in “means plus function” form and is not subject to 35 U.S.C. § 112, ¶ 6.

#### 4. “domain name services program”

Defendant Ingenico is the only defendant who has objected to the Report concerning this claim term. The Report recommends that this term is not in “means plus function” form and not subject to 35 U.S.C. § 112, ¶ 6. The “domain name services program” performs the function of dynamically assigning a server to receive portions of the transcription data for balancing the transaction data among the servers.

The patent specifications refer to “an enhanced Domain Name Services (DNS)” program and states that persons of ordinary skill in the art would be aware that DNS, also known as Bind according to the specification, statically translates name requests to Internet Protocol 4 (IP4) addresses. The specification then indicates that in the described embodiment, an enhanced DNS dynamically assigns IP4 addresses to balance the load among the servers.

Dr. Grimes, one of Defendants’ experts, argued that the term “domain name services program” has no clear, accepted meaning to one of ordinary skill in the art and does not describe a definite structure that is sufficient to perform entirely the functions of dynamically assigning servers and balancing the transaction data among them. However, he acknowledged that “Domain Name System” does have an accepted meaning to one of ordinary skill in the art, which is, “the hierarchical naming system for identifying TCP/IP hosts on the internet.” Dr. Grimes stated that a conventional Domain Name System program is not sufficient structure to perform the functions of dynamically assigning servers and balancing the transaction data among them. He pointed to the patent specification as stating that an enhanced DNS dynamically assigns IP4 addresses to balance the load among the servers.

In its objections to the Report, Defendant Ingenico re-urges its point that, even if the term “domain name services program” connotes structure, only an enhanced form of such a program can perform the functions recited in the claim. From the patent specification and from Dr. Grimes’ arguments, it is clear that the phrase “domain name services program” is a reference to an enhanced

form of a “domain name services program.” And, while the patent specification and Dr. Grimes agree that a “conventional DNS” does not “dynamically” assign addresses, the patent specification plainly indicates that an “enhanced DNS” can dynamically assign addresses. There is no indication that an “enhanced” form of the “domain name services program” would be known by a different name.

The Court finds that the “domain name services program” limitation is not in “means plus function” form and should not be construed according to 35 U.S.C. § 112, ¶ 6. Defendants have not presented sufficient evidence to overcome the presumption that § 112, ¶ 6 does not apply to this limitation because of the absence of the word “means.” The claim term “domain name services program” has a reasonably well-understood meaning and connotes sufficiently definite structure to a person of ordinary skill in the art for performing the recited functions.

#### **5. “predefined template”**

Defendant Ingenico is the only defendant who has objected to the Report concerning this claim term. The Report recommends that this term found to not be in “means plus function” form and not subject to 35 U.S.C. § 112, ¶ 6. According to the claims of the patents in the case, the “predefined template” partitions the stored transaction data into panels and identifies locations of the panels. The Magistrate found that the ordinary meaning of the word “template” is a pattern that is used as a guide or reference. Defendant Ingenico agreed that the term “predefined template” may be defined as “a pattern, mold, or the like,” and that the term “template” may have a recognized structure “in a given context for a particular purpose.” However, Ingenico argues that the functions performed by the “predefined template” are performed on data after it has been stored, and that neither the claims nor the Report identify any template structure that would enable the “predefined template” to perform such functions on already stored data.



The word “template” has a common, well-understood meaning of “a pattern, a mold, or the like.” As stated in the Report, the addition of the adjectival modifier “predefined” does not render the claim term less definite, as the definition of the word “template” suggests or implies “predefinition.” Whether the template is used on pre-stored data or on data that is already stored does not change the fact that it is still a template. The Court finds that the term “predefined template” is not in “means plus function” form and is not subject to 35 U.S.C. § 112, ¶ 6. A “predefined template,” being a pattern, mold or the like, connotes sufficiently definite structure for performing the functions recited in the claims.

#### 6. “network switch”

Defendant Ingenico is the only defendant who has objected to the Report concerning this claim term. The Report recommends that this term be found to not be in “means plus function” form and not subject to 35 U.S.C. § 112, ¶ 6. Certain of the claims of the ’988 and ’137 patents call for “at least one network switch” that “route[s] transaction data within said at least one second local area network and said at least one third local area network.” The *Microsoft Encyclopedia of Networking*, 2000, defines a “switch” to be “any device that can control the flow of electrical signals.” In a particularly relevant context, that reference goes on to state that “in the context of controlling data flow within a network, the term ‘switch’ is also used to describe a data-link layer device that routes frames between connected networks. Data flow switches include Local Area Network (LAN) switches: used to route Ethernet frames over a TCP/IP inter-network; also called Ethernet switches.” The patent specifications use the term “network switch” consistently with these given definitions.

Defendant Ingenico argues that the claims require this limitation to route the transaction data within multiple local area networks, whereas the definitions only speak to routing data (frames) between connected networks. Moreover, argues Ingenico, even if the patent specifications and prosecution history use the term “network switch” consistent with that term’s ordinary meaning, the

term as used in the claims does not connote sufficient structure to perform entirely the recited function.

The Court finds that the claim term “network switch” is not in “means plus function” form and is not subject to 35 U.S.C. § 112, ¶ 6. The dictionary definitions of the term connote sufficiently definite structures for routing data within or between local area networks. The definitions speak to controlling the flow of electrical signals, controlling data flow within a network, and routing frames between connected networks. The patent specifications do not use the term in a manner clearly inconsistent with the ordinary meaning. Thus, the plain meaning should govern, and the term is not in “means plus function” form.

#### **7. “data processing subsystem”**

Defendants J. P. Morgan and First Data objected to the Report concerning this claim term. The Report recommends that this term be found to not be in “means plus function” form and not subject to 35 U.S.C. § 112, ¶ 6. The “data processing subsystem” is recited in the claims directed to a “system for central management, storage and report generation of remotely captured paper transactions.” The “data processing subsystem” performs the functions of “processing, sending, verifying and storing the paper transaction data and the subsystem identification information.”

Plaintiff offered a definition for the term “data processing system” from the *IEEE Standard Dictionary of Electrical and Electronics Terms*, 6<sup>th</sup> Edition. The cited definition for the term “data processing system” is “a system, including computer systems and associated personnel, that performs input, processing, storage output, and control functions to accomplish a sequence of operations on data.” The Court has already found that a “system” and a “subsystem” are the same structurally, in the context of the relevant art.. As already stated, the term “subsystem” is defined in the *Modern Dictionary of Electronics*, 6<sup>th</sup> Edition, as “an organization of computer components (e.g., a tape drive and controller) that comprises a functional unit that is part of a larger system.”

That same source provides a second definition for the term “subsystem” as “a part or division of a system which in itself has the properties of a system.” Defendant J. P. Morgan argues that the fact there is a definition for the term does not mean it has a well understood meaning as a name for structure. However, the dictionary definition is evidence that the term has an understood meaning to persons of ordinary skill in the art.

Defendants’ expert Dr. Dahlberg argued that the phrase “data processing subsystem” is “not a well-understood name of a definite structure used by persons of ordinary skill in the relevant art.” Defendant J. P. Morgan emphasizes this point in its objections, arguing that “[m]eans-plus-function is only avoided where there is a recitation of sufficient definite structure to perform the specified functions.” (emphasis Defendant’s). The Federal Circuit Court, however, has made clear that the relevant inquiry is whether “sufficiently definite structure” is suggested to the ordinarily-skilled artisan. *Apex, Inc.*, 325 F.3d at 1374. A claim term need not invoke a particular structure or a precise physical structure to avoid application of § 112, ¶ 6.

Defendants’ expert Dr. Dahlberg acknowledges that the term “data processing system (or subsystem)” connotes structure in pointing out that “almost any system that includes just one microprocessor, with its associated memory and input/output interfaces, can be said to have a subsystem that processes data in a central location.” Dr. Dahlberg recognizes that a “data processing subsystem” may include structural components such as a microprocessor and memory, components that are commonly part of a “computer system,” and the dictionary definition for the term “data processing system” includes reference to a “computer system.”

The Court finds that the phrase “data processing subsystem” is not in “means plus function” form and should not be construed according to 35 U.S.C. § 112, ¶ 6. The absence of the word “means” gives rise to a presumption that § 112, ¶ 6 does not apply, and, in view of the dictionary definitions and other evidence discussed above, the Court finds that Defendants have not overcome the presumption. Furthermore, nothing in the patent specification or prosecution history rebuts this

presumption. The Court finds that, in view of all the evidence, including the dictionary definitions of the word “subsystem” and the phrase “data processing system,” the term “data processing subsystem” connotes sufficiently definite structure to the person of ordinary skill in the art for performing the recited functions.

#### **8. Method claims “managing” steps**

Defendant J. P. Morgan is the only defendant who has objected to the Report concerning the method claim steps that call for “managing.” The Report recommends that these terms be found to not be in “step plus function” form and not subject to 35 U.S.C. § 112, ¶ 6. The method claims of the ’988 and ’137 patents include three (3) limitations that call for “managing.” Specifically, the claims call for:

“managing the capturing and sending of the transaction data;”

“managing the collecting, processing, sending and storing of the transaction data;” and

“managing the collecting and sending of the transaction data.”

The Magistrate has recommended that these terms be found to not be in “step plus function” form and not subject to 35 U.S.C. § 112, ¶ 6. Defendant J. P. Morgan objects that the Report summarily discounts these phrases as outside § 112, ¶ 6 because the traditional form of using the phrase “step for” was not used. Defendant argues that such an analysis is not in accordance with the statutory mandate.

Defendant argues that its expert, Dr. Dahlberg, opined that in the field of patents, the word “managing” refers to function. Plaintiff did not offer evidence to contradict that opinion. According to Defendant, “managing is only suggestive of what is accomplished, and it does not indicate how the function is accomplished.

The Court of Appeals for the Federal Circuit said in *Masco Corp.*, 303 F.3d at 1327:

Where the claim drafter has not signaled his intent to invoke § 112, paragraph 6 by using the ‘step[s] for’ language, we are unwilling to resort to that provision to constrain the scope of coverage of a claim limitation without a showing that the limitation contains nothing that can be construed as an act. . . . We thus hold that where a method claim does not contain the term ‘step[s] for,’ a limitation of that claim cannot be construed as a step-plus-function limitation without a showing that the limitation contains no act.

The Court finds that the word “managing” can be construed as an act, that is, some action to be taken in performing the claimed method. In particular, in addressing the limitation of “managing the capturing and sending of the transaction data,” Dr. Dahlberg stated “the claim element only indicates to a person of ordinary skill in the art that the process requires some thing to make sure the functions of capturing and sending are performed properly.” Page 36 of Dr. Dahlberg’s Expert Report. In addressing the remaining two “managing” limitations, Dr. Dahlberg makes essentially the identical statement – “the claim element only indicates to a person of ordinary skill in the art that the process requires some thing to make sure the functions . . . are performed properly.” Pages 37 and 38 of Dr. Dahlberg’s Expert Report.

From these statements, the Court finds that the term “managing” can be construed as an act, not merely as a function. In particular, “some thing making sure that functions are properly performed” can be construed as an act of managing the functions. Defendant J. P. Morgan has not presented sufficient evidence to show that the limitations contain nothing that can be construed as an act, and the presumption that these claim terms are not in “step plus function” form has not been overcome. The Court finds that the subject “managing” steps are not in “step plus function” form and are not subject to 35 U.S.C. § 112, ¶ 6.

V. CONCLUSION

For the forgoing reasons, it is hereby **ORDERED** that Plaintiff's objections are sustained and Defendants' objections are overruled.

Signed this 19<sup>th</sup> day of February, 2004.

  
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DAVID FOLSOM  
UNITED STATES DISTRICT JUDGE